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NOTICE OF ALLOWANCE AND FEE(S) DUE

18

7590

07/15/2003

ROBERTS ABOKHAIR & MARDULA LLC
SUITE 1000
11800 SUNRISE VALLEY DRIVE
RESTON, VA 201915302

EXAMINER

HARLE, JENNIFER I

ART UNIT

CLASS-SUBCLASS

3627

705-003000

DATE MAILED: 07/15/2003

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/443.072	11/18/1999	BRIAN A. ROSENFELD MD	483-001	6723

TITLE OF INVENTION: SYSTEM AND METHOD FOR PROVIDING CONTINUOUS, EXPERT NETWORK CRITICAL CARE SERVICES FROM A REMOTE LOCATION(S)

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$650	\$0	\$650	10/15/2003

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. **PROSECUTION ON THE MERITS IS CLOSED.** THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN **THREE MONTHS** FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. **THIS STATUTORY PERIOD CANNOT BE EXTENDED.** SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

- A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.
- B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

- A. Pay TOTAL FEE(S) DUE shown above, or
- B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.
- ☐ Applicant claims SMALL ENTITY status.
See 37 CFR 1.27.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: **Mail** **Mail Stop ISSUE FEE**
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INSTRUCTIONS: This form should be used for transmitting the **ISSUE FEE** and **PUBLICATION FEE** (if required). Blocks 1 through 4 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Legibly mark-up with any correction or use Block 1)
7590 07/15/2003

ROBERTS ABOKHAIR & MARDULA LLC
SUITE 1000
11800 SUNRISE VALLEY DRIVE
RESTON, VA 201915302

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Box Issue Fee address above, or being facsimile transmitted to the USPTO, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

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nonprovisional	YES	\$650	\$0	\$650	10/15/2003

EXAMINER	ART UNIT	CLASS-SUBCLASS
HARLE, JENNIFER I	3627	705-003000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.

☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a **Customer Number** is required.

2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 _____
2 _____
3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. Inclusion of assignee data is only appropriate when an assignment has been previously submitted to the USPTO or is being submitted under separate cover. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) ☐ individual ☐ corporation or other private group entity ☐ government

4a. The following fee(s) are enclosed:

- ☐ Issue Fee
☐ Publication Fee
☐ Advance Order - # of Copies _____

4b. Payment of Fee(s):

- ☐ A check in the amount of the fee(s) is enclosed.
☐ Payment by credit card. Form PTO-2038 is attached.
☐ The Commissioner is hereby authorized to charge the required fee(s), or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

Commissioner for Patents is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above.

(Authorized Signature)

(Date)

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Alexandria, Virginia 22313-1450. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS.** SEND TO: Commissioner for Patents, Alexandria, Virginia 22313-1450.

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7590	07/15/2003		EXAMINER	
ROBERTS ABOKHAIR & MARDULA LLC SUITE 1000 11800 SUNRISE VALLEY DRIVE RESTON, VA 201915302			HARLE, JENNIFER I	
			ART UNIT	PAPER NUMBER
			3627	

DATE MAILED: 07/15/2003

Determination of Patent Term Extension under 35 U.S.C. 154 (b) (application filed after June 7, 1995 but prior to May 29, 2000)

The patent term extension is 0 days. Any patent to issue from the above identified application will include an indication of the 0 day extension on the front page.

If a continued prosecution application (CPA) was filed in the above-identified application, the filing date that determines patent term extension is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system. (<http://pair.uspto.gov>)

Any questions regarding the patent term extension or adjustment determination should be directed to the Office of Patent Legal Administration at (703)305-1383.



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ROBERTS ABOKHAIR & MARDULA LLC SUITE 1000 11800 SUNRISE VALLEY DRIVE RESTON, VA 201915302				
			EXAMINER HARLE, JENNIFER I	
			ART UNIT 3627	PAPER NUMBER
DATE MAILED: 07/15/2003				

Notice of Fee Increase on January 1, 2003

If a reply to a "Notice of Allowance and Fee(s) Due" is filed in the Office on or after January 1, 2003, then the amount due will be higher than that set forth in the "Notice of Allowance and Fee(s) Due" since there will be an increase in fees effective on January 1, 2003. See Revision of Patent and Trademark Fees for Fiscal Year 2003; Final Rule, 67 Fed. Reg. 70847, 70849 (November 27, 2002).

The current fee schedule is accessible from: <http://www.uspto.gov/main/howtofees.htm>.

If the issue fee paid is the amount shown on the "Notice of Allowance and Fee(s) Due," but not the correct amount in view of the fee increase, a "Notice to Pay Balance of Issue Fee" will be mailed to applicant. In order to avoid processing delays associated with mailing of a "Notice to Pay Balance of Issue Fee," if the response to the Notice of Allowance and Fee(s) due form is to be filed on or after January 1, 2003 (or mailed with a certificate of mailing on or after January 1, 2003), the issue fee paid should be the fee that is required at the time the fee is paid. If the issue fee was previously paid, and the response to the "Notice of Allowance and Fee(s) Due" includes a request to apply a previously-paid issue fee to the issue fee now due, then the difference between the issue fee amount at the time the response is filed and the previously paid issue fee should be paid. See Manual of Patent Examining Procedure, Section 1308.01 (Eighth Edition, August 2001).

Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

Notice of Allowability

Application No.

09/443,072

Examiner

Jennifer I. Harle

Applicant(s)

ROSENFELD MD ET AL.

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 03/03/03.
2. ☒ The allowed claim(s) is/are 15, 17-19 and 21-29.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

5. ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No. _____.
 - (b) ☐ including changes required by the proposed drawing correction filed _____, which has been approved by the Examiner.
 - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the top margin (not the back) of each sheet. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1 <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 2 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 4 <input type="checkbox"/> Interview Summary (PTO-413), Paper No. _____ |
| 5 <input type="checkbox"/> Information Disclosure Statements (PTO-1449), Paper No. _____ | 6 <input type="checkbox"/> Examiner's Amendment/Comment |
| 7 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9 <input type="checkbox"/> Other |

DETAILED ACTION

Claims 15, 17-19, and 21-29 are pending. Claims 15, 17-19, and 21-29 are allowed.

Drawings

The corrected or substitute drawings were received on March 8, 2002. These drawings are acceptable substantively. However, all drawing must comply with the Notice of Draftsperson's Patent Drawing Review sent concomitantly.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with applicant's attorney, Jon Roberts on May 13, 2003.

Claim 15. (Currently amended) A system for providing continuous and proactive expert network health care services from a remote location comprising:

a plurality of geographically dispersed ICU's;

a single remote intensivist managed healthcare command center for managing healthcare at said plurality of ICU's; and

at least one network;

wherein said plurality of ICU's include means for transmitting voice and data to said remote command center by the at least one network,

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Gad and wherein said remote command center further comprises at least one intensivist workstation connected to a computerized patient care management system adapted for proactive monitoring and intervention for individual patients at any of said plurality of geographically dispersed ICU's 24 hours per day, seven days a week, triggered by evidence-based data-driven feedback.

G2 Claim 25. (Currently Amended) A method for providing continuous and proactive expert critical care comprising:

monitoring patients in a plurality of geographically dispersed ICU's;
communicating voice and data from patient monitoring to a single remote intensivist managed healthcare command center over a first network;
receiving and analyzing the information from the patient monitoring at the remote command center over the first network; and
proactively intervening from the remote command center at the plurality of geographically dispersed ICU's monitored 24 hours per day, seven days a week, with patient care, wherein the proactive intervention from the remote command center via at least one intensivist workstation is triggered by evidence-based data-driven feedback from decision support algorithms.

Reasons for Allowance

The following is an examiner's statement of reasons for allowance:

The present invention comprises independent claims 15 and 25. These claims include the following features that distinguish applicant's invention over the prior art: single remote intensivist managed healthcare command center for managing healthcare at the plurality of

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ICU's where the management, monitoring and intervention which occurs by an intensivist, 24 hours a day, seven days a week is specifically adapted to provide the data at each command center/remote location through links which provide ICU clinical data, video data and audio data. The video and clinical data is provided via monitoring equipment. The audio links allow interactive communication between intensivists at the command center and the patients and staff at the ICU bed location. Signals from the monitoring equipment are submitted to a knowledge based patient care management system which comprises ICU standardized guidelines triggered by evidence based data driven feedback to the intensivist for the care of the critically ill and that prompts the intensivist to engage in early intervention to minimize adverse events. One facet of this invention is linked to the use of the proactive intervention as noted in the features that distinguish applicants' invention over the prior art of record. This structure is set forth for example on pages 8-10.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 5,619,991 Delivery of Medical Services Using Electronic Data Communication teaches diagnosis and/or treatment of patient disease using electronic data communications between not only the physician and his/her patient but between the physician and one or more entities which can contribute to the patient's diagnosis and/or treatment. Thus, it is not taught that there is one central location for monitoring and intervention of a plurality of geographically dispersed ICU's, nor is the monitoring 24 hours a day, seven days a week specifically targeted to intensivist type information and feedback.

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US 5,822,544 Patient Care and Communication System teaches a central processing system and a plurality of remote stations (includes control stations, patient stations and staff stations – all of which are located within the hospital). Thus, it is not taught that there is one central location for monitoring and intervention of a plurality of geographically dispersed ICU's, twenty-four hours a day, seven days a week.

US 6,385,589 teaches monitoring members of a population for information indicative of a medical event, automatic identification of a risk situation based on the member characteristics and generation of a notification to address the risk situation associated with a predetermined script. The monitoring is preferably periodic and notification is sent to a coordination specialist, who forwards the information to the appropriate entity to intervene. Thus, it is not required that the monitoring be conducted 24 hours a day 7 days a week. Nor is it taught or even suggested that the monitoring is performed on a plurality of geographically dispersed ICU's.

WO 99/13766, Critical Care Management System Incorporating Remote Imaging and Telemetry teaches a critical care bed for allowing the acquisition, analysis, display and conveyance of patient-related data from a variety of transducers which can send information to a variety of places including medical universities, physician's offices and homes, skilled nursing facilities, patient family members homes. However, it is not taught that there is one central location for monitoring and intervention of a plurality of geographically dispersed ICU's twenty-four hours a day, seven days a week. Rather, this system is designed for random checking on patients and for consultations.

Silvia Miksch, Artificial Intelligence for Decision Support: Needs Possibilities, and Limitations in ICU, 10th Postgraduate Course in Critical Care Medicine APICE '95, Springer,

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1995, teaches how AI could be used for decision support in modern ICUs. Miksch suggests building a knowledge-based monitoring and therapy planning system for ICUs utilizing a knowledge-based approach. However, remote monitoring is not discussed nor suggested.

Ho Sung Lee, et al., Remote Patient Monitoring Service through World-Wide Web, Proceedings -19th International Conference- IEEE/EMBS, October 30-November 2, 1997, pp. 928-931, teaches real-time remote patient monitoring through the World-Wide Web, which allows physicians to monitor their patients (including patients in ICUs) in remote sites, using web browsers. However, it is not taught that there is one central location for monitoring and intervention of a plurality of geographically dispersed ICU's, twenty-four hours a day, seven days a week, Rather this system is designed for random checking on patients.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer I. Harle whose telephone number is (703) 306-2906. The examiner can normally be reached on Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Olszewski can be reached on (703) 308-5183. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7687 for regular communications and (703) 305-7687 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

Jennifer Ione Harle
June 26, 2003


Richard Chilcot
Senior Patent Examiner
Technology Center 26
2627